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Grace Reports First Quarter 2019 Results Driven by 9% Sales Growth; Reaffirms Full-Year Outlook

- Net sales up 8.8%, up 11.3% on constant currency, driven by the 2Q18 polyolefin catalysts acquisition, higher sales volumes and improved pricing
- Diluted EPS of \$0.37, including a previously disclosed pretax charge of \$45.0 million, or \$0.52 per share, for the estimated costs of construction of a new dam spillway at our former vermiculite mine site
- Adjusted EPS of \$0.93, up 13.4%
- Reaffirming full-year 2019 outlook, including Adjusted EPS of \$4.53 - \$4.62

COLUMBIA, Md., - April 25, 2019 - W. R. Grace & Co. (NYSE: GRA) today announced financial results for the first quarter of 2019, summarized in the table below, and reaffirmed its full-year 2019 outlook.

Summary Financial Results - Total Grace			
<i>(In \$ millions, except per share amounts)</i>			
	1Q19	1Q18	Change
Net sales	469.5	431.5	8.8 %
<i>Net sales, constant currency</i>			11.3 %
Net income	24.7	43.6	(43.3)%
Adjusted EBIT	104.4	95.8	9.0 %
Adjusted EBIT margin	22.2%	22.2%	0.0 pts
Diluted EPS	\$0.37	\$0.64	(42.2)%
Adjusted EPS	\$0.93	\$0.82	13.4 %
Dividends per share	\$0.27	\$0.24	12.5 %
	YTD 2019	YTD 2018	Change
Net cash provided by operating activities	71.0	89.0	(20.2)%
Adjusted Free Cash Flow	42.8	55.1	(22.3)%
	TTM 1Q19	TTM 1Q18	Change
Adjusted EBIT ROIC	20.7%	24.7%	(4.0) pts

Note: See Analysis of Operations and Notes for information on Non-GAAP financial measures

- First quarter sales of \$469.5 million increased 8.8%, up 11.3% on constant currency. Sales growth was driven by the polyolefin catalysts acquisition (5.9%), higher sales volumes (3.2%) and improved pricing (2.2%), reflecting continued demand for our high-performance products.

- Net income decreased \$18.9 million and Diluted EPS decreased \$0.27 per share due to a previously disclosed pretax charge of \$45.0 million, or \$0.52 per share, for the estimated costs of construction of a new dam spillway at our former vermiculite mine site in Libby, Montana. We expect construction to be completed by the end of 2023.
- Adjusted EBIT of \$104.4 million was up 9.0%. Adjusted EBIT margin was 22.2%.
- Adjusted EPS of \$0.93 was up 13.4%, slightly above the 1Q19 outlook provided in February primarily due to order timing within the first half of the year.
- Adjusted Free Cash Flow was \$42.8 million.
- Adjusted EBIT ROIC was 20.7%, down 400 bps year-over-year as a result of the polyolefin catalysts acquisition.

Delivering on Our Strategic Initiatives

"Our team delivered another strong quarter of sales and earnings growth," said Hudson La Force, Grace's President and Chief Executive Officer. "We continue to see good demand and I am confident in our full-year outlook, including Adjusted EPS growth of 10-12%. Our commercial excellence and operating excellence initiatives are adding to growth and profitability now, and our strategic growth investments are positioning us well for the future."

Grace's strategic framework for profitable growth includes four elements:

- Invest to accelerate growth and extend our competitive advantages
- Invest in great people to strengthen our high-performance culture
- Execute the Grace Value Model to drive operating excellence
- Acquire to build our technology and manufacturing capabilities for our customers

First Quarter Segment Performance

Catalysts Technologies

Catalysts Technologies includes catalysts and additives for plastics, refinery, and other chemical process applications, as well as polypropylene process technology licensing.

Summary Financial Results - Catalysts Technologies			
(In \$ millions)	1Q19	1Q18	Change
Net sales	349.7	315.8	10.7%
<i>Net sales, constant currency</i>			12.3%
Gross margin	42.4%	41.5%	0.9 pts
Operating income	101.4	92.1	10.1%
Operating margin	29.0%	29.2%	(0.2) pts

- First quarter sales of \$349.7 million increased 10.7%, up 12.3% on constant currency, driven by the polyolefin catalysts acquisition (8.1%), improved pricing (2.2%) and higher sales volumes (2.0%).
 - Refining Technology sales decreased \$1.6 million, or 0.9%, to \$181.8 million, impacted by lower MTO sales and unfavorable currency, partially offset by improved pricing and higher sales volumes of FCC catalysts. For the trailing twelve months, FCC catalyst pricing improved more than 200 bps.

- Specialty Catalysts sales were up \$35.5 million, or 26.8%, to \$167.9 million, driven by the polyolefin catalysts acquisition, higher sales volumes and improved pricing, partially offset by unfavorable currency.
- Gross margin of 42.4% was up 90 bps driven by improved pricing and higher sales volumes, partially offset by 100 bps of inflation on raw materials and energy costs.
- Operating income of \$101.4 million increased 10.1% driven by higher gross profit, partially offset by \$1.3 million of lower income from our ART joint venture. Operating margin declined from 29.2% to 29.0%.

Materials Technologies

Materials Technologies includes specialty materials, including silica-based and silica-alumina-based materials, for consumer/pharma, chemical process and coatings applications.

Summary Financial Results - Materials Technologies			
<u>(In \$ millions)</u>	<u>1Q19</u>	<u>1Q18</u>	<u>Change</u>
Net sales	119.8	115.7	3.5 %
<i>Net sales, constant currency</i>			8.4 %
Gross margin	36.4%	36.3%	0.1 pts
Operating income	24.0	24.1	(0.4)%
Operating margin	20.0%	20.8%	(0.8) pts

- First quarter sales of \$119.8 million increased 3.5%, up 8.4% on constant currency. Sales growth was driven by higher sales volumes (6.0%) and improved pricing (2.4%). Continued strength in consumer/pharma and chemical process applications offset the expected softening in coatings sales volumes in China.
- Gross margin of 36.4% increased 10 bps driven by favorable price/mix, partially offset by 160 bps of inflation on raw materials and energy costs.
- Operating income of \$24.0 million was down 0.4%. Operating margin declined from 20.8% to 20.0% primarily due to higher selling expenses.

Capital Allocation

- **Capital investments:** In 1Q19, we invested \$50.2 million to support growth, operating excellence and other priorities. For 2019, we continue to expect to invest \$200-\$210 million as part of our previously outlined, multi-year investment program to accelerate growth, extend our competitive advantages and drive operating excellence.
- **Share repurchase program:** In 1Q19, we repurchased \$4.8 million of common stock, or approximately 69,900 shares, at an average per share price of \$68.42.
- **Dividend:** In 1Q19, we returned \$18.4 million to shareholders in cash dividends.

2Q19 and Full-Year 2019 Outlook

We are reaffirming our full-year 2019 outlook, which is presented in the table below.

Full-Year 2019 Outlook	2019 Outlook	
	2019 Outlook (as of 4/25/19)	YoY
	(In \$ millions, except per share amounts)	
Sales growth (total)	6% - 7%	
Adjusted EBIT	\$490 - \$500M	7% - 9%
Adjusted EPS	\$4.53 - \$4.62	10% - 12%
Adjusted Free Cash Flow	\$235 - \$250M	
<i>Note: We are unable to estimate the annual mark-to-market pension adjustment or future net income or diluted EPS.</i>		

Investor Call

We will discuss these results during an investor conference call and webcast today starting at 9:00 a.m. ET. To access the call and webcast, interested participants should go to the Investors portion of our website, www.grace.com, and click on the webcast link.

Those without access to the internet can participate by dialing +1 844.515.9173 (U.S.) or +1 574.990.9421 (International). The participant passcode is 3277809. Investors are advised to dial into the call at least 10 minutes early in order to register.

An audio replay will be available after 1:00 p.m. ET on April 25. For one week, the replay will be accessible by dialing +1 855.859.2056 (U.S.) or +1 404.537.3406 (International) and entering the participant passcode 3277809. The webcast replay or transcript will be available for one year on the company's website.

About Grace

Built on talent, technology, and trust, Grace is a leading global supplier of catalysts and engineered materials. The company's two industry-leading business segments—Catalysts Technologies and Materials Technologies—provide innovative products, technologies, and services that enhance the products and processes of our customers around the world. With approximately 3,900 employees, Grace operates and/or sells to customers in over 70 countries. More information about Grace is available at grace.com.

Forward-Looking Statements

This announcement contains forward-looking statements, that is, information related to future, not past, events. Such statements generally include the words "believes," "plans," "intends," "targets," "will," "expects," "suggests," "anticipates," "outlook," "continues," or similar expressions. Forward-looking statements include, without limitation, expected financial positions; results of operations; cash flows; financing plans; business strategy; operating plans; capital and other expenditures; competitive positions; growth opportunities for existing products; benefits from new technology and cost reduction initiatives, plans and objectives; and markets for securities. For these statements, Grace claims the protections of the safe harbor for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Exchange Act. Like other businesses, Grace is subject to risks and uncertainties that could cause its actual results to differ materially from its projections or that could cause other forward-looking statements to prove incorrect. Factors that could cause actual results to differ materially from those contained in the forward-looking statements include, without limitation: risks related to foreign operations, especially in emerging regions; the costs and availability of raw materials, energy and transportation; the effectiveness of its research and development and growth investments; acquisitions and divestitures of assets and businesses; developments affecting Grace's outstanding indebtedness; developments affecting Grace's pension obligations; legacy matters (including product, environmental, and other legacy liabilities) relating to past activities of Grace; its legal and environmental proceedings; environmental compliance costs; the inability to establish or maintain certain business relationships; the inability to hire or retain key personnel; natural disasters such as storms and floods,

and force majeure events; changes in tax laws and regulations; international trade disputes, tariffs, and sanctions; the potential effects of cyberattacks; and those additional factors set forth in Grace's most recent Annual Report on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K, which have been filed with the Securities and Exchange Commission and are readily available on the internet at www.sec.gov. Reported results should not be considered as an indication of future performance. Readers are cautioned not to place undue reliance on Grace's projections and forward-looking statements, which speak only as of the dates those projections and statements are made. Grace undertakes no obligation to release publicly any revision to the projections and forward-looking statements contained in this announcement, or to update them to reflect events or circumstances occurring after the date of this announcement.

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W. R. Grace & Co. and Subsidiaries
Consolidated Statements of Operations (unaudited)

Three Months Ended
March 31,

(In millions, except per share amounts)	2019	2018
Net sales	\$ 469.5	\$ 431.5
Cost of goods sold	280.9	262.0
Gross profit	188.6	169.5
Selling, general and administrative expenses	73.2	68.4
Research and development expenses	17.0	14.7
Costs related to legacy matters	46.9	2.0
Equity in earnings of unconsolidated affiliate	(4.1)	(5.4)
Restructuring and repositioning expenses	2.3	5.6
Interest expense and related financing costs	20.0	19.3
Other (income) expense, net	(2.2)	(3.3)
Total costs and expenses	153.1	101.3
Income (loss) before income taxes	35.5	68.2
(Provision for) benefit from income taxes	(10.9)	(24.8)
Net income (loss)	24.6	43.4
Less: Net (income) loss attributable to noncontrolling interests	0.1	0.2
Net income (loss) attributable to W. R. Grace & Co. shareholders	\$ 24.7	\$ 43.6
Earnings Per Share Attributable to W. R. Grace & Co. Shareholders		
Basic earnings per share:		
Net income (loss)	\$ 0.37	\$ 0.64
Weighted average number of basic shares	66.8	67.6
Diluted earnings per share:		
Net income (loss)	\$ 0.37	\$ 0.64
Weighted average number of diluted shares	66.9	67.7
Dividends per common share	\$ 0.27	\$ 0.24

The Notes to the Financial Information are included as part of the Earnings Release.

W. R. Grace & Co. and Subsidiaries
Consolidated Statements of Cash Flows (unaudited)

(In millions)	Three Months Ended March 31,	
	2019	2018
OPERATING ACTIVITIES		
Net income (loss)	\$ 24.6	\$ 43.4
Reconciliation to net cash provided by (used for) operating activities:		
Depreciation and amortization	24.9	25.0
Equity in earnings of unconsolidated affiliate	(4.1)	(5.4)
Costs related to legacy matters	46.9	2.0
Cash paid for legacy matters	(3.2)	(6.3)
Provision for income taxes	10.9	24.8
Cash paid for income taxes	(10.9)	(8.9)
Income tax refunds received	0.8	—
Interest expense and related financing costs	20.0	19.3
Cash paid for interest	(6.5)	(5.3)
Defined benefit pension expense	4.8	3.8
Cash paid under defined benefit pension arrangements	(4.0)	(3.7)
Changes in assets and liabilities, excluding effect of currency translation and acquisitions:		
Trade accounts receivable	26.6	20.1
Inventories	(35.5)	(23.0)
Accounts payable	3.5	10.5
All other items, net	(27.8)	(7.3)
Net cash provided by (used for) operating activities	71.0	89.0
INVESTING ACTIVITIES		
Cash paid for capital expenditures	(38.2)	(50.1)
Other investing activities, net	(7.9)	1.6
Net cash provided by (used for) investing activities	(46.1)	(48.5)
FINANCING ACTIVITIES		
Borrowings under credit arrangements	2.2	8.6
Repayments under credit arrangements	(5.7)	(11.7)
Cash paid for repurchases of common stock	(4.8)	(35.0)
Proceeds from exercise of stock options	9.2	0.8
Dividends paid to shareholders	(18.4)	(16.2)
Other financing activities, net	(4.3)	(1.6)
Net cash provided by (used for) financing activities	(21.8)	(55.1)
Effect of currency exchange rate changes on cash and cash equivalents	(0.3)	2.4
Net increase (decrease) in cash and cash equivalents	2.8	(12.2)
Cash, cash equivalents, and restricted cash beginning of period	201.0	163.5
Cash, cash equivalents, and restricted cash, end of period	\$ 203.8	\$ 151.3

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W. R. Grace & Co. and Subsidiaries
Consolidated Balance Sheets (unaudited)

(In millions, except par value and shares)	March 31, 2019	December 31, 2018
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 203.4	\$ 200.5
Restricted cash and cash equivalents	0.4	0.5
Trade accounts receivable, less allowance of \$11.7 (2018—\$11.6)	257.8	288.5
Inventories	316.2	281.1
Other current assets	202.8	86.7
Total Current Assets	980.6	857.3
Properties and equipment, net of accumulated depreciation and amortization of \$1,495.1 (2018—\$1,482.8)	1,043.7	1,011.7
Goodwill	540.3	540.4
Technology and other intangible assets, net	351.1	356.5
Deferred income taxes	525.6	529.4
Investment in unconsolidated affiliate	159.5	156.1
Other assets	45.6	113.9
Total Assets	\$ 3,646.4	\$ 3,565.3
LIABILITIES AND EQUITY		
Current Liabilities		
Debt payable within one year	\$ 22.5	\$ 22.3
Accounts payable	257.5	248.6
Other current liabilities	356.0	243.5
Total Current Liabilities	636.0	514.4
Debt payable after one year	1,961.6	1,961.0
Unfunded defined benefit pension plans	362.9	366.0
Underfunded defined benefit pension plans	67.6	67.1
Other liabilities	264.5	319.8
Total Liabilities	3,292.6	3,228.3
Equity		
Common stock issued, par value \$0.01; 300,000,000 shares authorized; outstanding: 66,915,399 (2018—66,792,968)	0.7	0.7
Paid-in capital	469.1	481.1
Retained earnings	683.3	676.7
Treasury stock, at cost: shares: 10,541,234 (2018—10,663,659)	(881.8)	(895.5)
Accumulated other comprehensive income (loss)	76.5	67.9
Total W. R. Grace & Co. Shareholders' Equity	347.8	330.9
Noncontrolling interests	6.0	6.1
Total Equity	353.8	337.0
Total Liabilities and Equity	\$ 3,646.4	\$ 3,565.3

The Notes to the Financial Information are included as part of the Earnings Release.

W. R. Grace & Co. and Subsidiaries
Analysis of Operations (unaudited)

(In millions, except per share amounts)	Three Months Ended March 31,		
	2019	2018	% Change
Net sales:			
Catalysts Technologies	\$ 349.7	\$ 315.8	10.7 %
Materials Technologies	119.8	115.7	3.5 %
Total Grace net sales	\$ 469.5	\$ 431.5	8.8 %
Net sales by region:			
North America	\$ 144.5	\$ 126.0	14.7 %
Europe Middle East Africa	194.6	178.7	8.9 %
Asia Pacific	109.2	100.2	9.0 %
Latin America	21.2	26.6	(20.3)%
Total net sales by region	\$ 469.5	\$ 431.5	8.8 %
Performance measures:			
Adjusted EBIT(A)(B):			
Catalysts Technologies segment operating income	\$ 101.4	\$ 92.1	10.1 %
Materials Technologies segment operating income	24.0	24.1	(0.4)%
Corporate costs	(16.2)	(16.6)	2.4 %
Certain pension costs(C)	(4.8)	(3.8)	(26.3)%
Adjusted EBIT	104.4	95.8	9.0 %
Costs related to legacy matters	(46.9)	(2.0)	
Restructuring and repositioning expenses	(2.3)	(5.6)	
Third-party acquisition-related costs	(0.3)	(0.9)	
Interest expense, net	(19.3)	(18.9)	(2.1)%
(Provision for) benefit from income taxes	(10.9)	(24.8)	56.0 %
Income (loss) attributable to W. R. Grace & Co. shareholders	\$ 24.7	\$ 43.6	(43.3)%
Diluted EPS	\$ 0.37	\$ 0.64	(42.2)%
Adjusted EPS(A)	\$ 0.93	\$ 0.82	13.4 %

The Notes to the Financial Information are included as part of the Earnings Release.

W. R. Grace & Co. and Subsidiaries
Analysis of Operations (unaudited) (continued)

(In millions)	Three Months Ended March 31,		
	2019	2018	% Change
Adjusted profitability performance measures(A)(B)(C):			
Gross Margin:			
Catalysts Technologies	42.4 %	41.5 %	0.9 pts
Materials Technologies	36.4 %	36.3 %	0.1 pts
Adjusted Gross Margin	40.9 %	40.1 %	0.8 pts
Pension costs in cost of goods sold	(0.7)%	(0.8)%	0.1 pts
Total Grace	40.2 %	39.3 %	0.9 pts
Adjusted EBIT:			
Catalysts Technologies	\$ 101.4	\$ 92.1	10.1 %
Materials Technologies	24.0	24.1	(0.4)%
Corporate, pension, and other	(21.0)	(20.4)	(2.9)%
Total Grace	104.4	95.8	9.0 %
Depreciation and amortization:			
Catalysts Technologies	\$ 20.5	\$ 19.4	5.7 %
Materials Technologies	3.5	4.7	(25.5)%
Corporate	0.9	0.9	— %
Total Grace	24.9	25.0	(0.4)%
Adjusted EBITDA:			
Catalysts Technologies	\$ 121.9	\$ 111.5	9.3 %
Materials Technologies	27.5	28.8	(4.5)%
Corporate, pension, and other	(20.1)	(19.5)	(3.1)%
Total Grace	129.3	120.8	7.0 %
Adjusted EBIT margin:			
Catalysts Technologies	29.0 %	29.2 %	(0.2) pts
Materials Technologies	20.0 %	20.8 %	(0.8) pts
Total Grace	22.2 %	22.2 %	0.0 pts
Adjusted EBITDA margin:			
Catalysts Technologies	34.9 %	35.3 %	(0.4) pts
Materials Technologies	23.0 %	24.9 %	(1.9) pts
Total Grace	27.5 %	28.0 %	(0.5) pts

The Notes to the Financial Information are included as part of the Earnings Release.

W. R. Grace & Co. and Subsidiaries
Analysis of Operations (unaudited) (continued)

(In millions)	Three Months Ended March 31,	
	2019	2018
Cash flow measure(A):		
Net cash provided by (used for) operating activities	\$ 71.0	\$ 89.0
Cash paid for capital expenditures	(38.2)	(50.1)
Free Cash Flow	32.8	38.9
Cash paid for legacy matters	3.2	6.3
Cash paid for repositioning	3.5	4.6
Cash paid for third-party acquisition-related costs	0.3	2.1
Cash paid for restructuring	3.0	3.2
Adjusted Free Cash Flow	\$ 42.8	\$ 55.1

(In millions)	Four Quarters Ended March 31,	
	2019	2018
Calculation of Adjusted EBIT Return On Invested Capital (trailing four quarters)(A):		
Adjusted EBIT	\$ 465.3	\$ 423.0
Invested Capital:		
Trade accounts receivable	257.8	269.1
Inventories	316.2	256.2
Accounts payable	(257.5)	(217.3)
	316.5	308.0
Other current assets (excluding income taxes)	183.3	43.9
Properties and equipment, net	1,043.7	829.4
Goodwill	540.3	405.2
Technology and other intangible assets, net	351.1	251.6
Investment in unconsolidated affiliate	159.5	132.2
Other assets (excluding capitalized financing fees)	42.9	44.3
Other current liabilities (excluding income taxes, legacy matters, accrued interest, and restructuring)	(278.2)	(157.8)
Other liabilities (excluding income taxes and legacy matters)	(109.8)	(142.7)
Total invested capital	\$ 2,249.3	\$ 1,714.1
Adjusted EBIT Return On Invested Capital	20.7%	24.7%

The Notes to the Financial Information are included as part of the Earnings Release.

W. R. Grace & Co. and Subsidiaries
Analysis of Operations (unaudited)

(In millions, except per share amounts)	Three Months Ended March 31,							
	2019				2018			
	Pre-Tax	Tax Effect	After-Tax	Per Share	Pre-Tax	Tax Effect	After-Tax	Per Share
Adjusted EPS:								
Diluted earnings per share				\$ 0.37				\$ 0.64
Costs related to legacy matters	\$ 46.9	\$ 10.9	\$ 36.0	0.54	\$ 2.0	\$ 0.3	\$ 1.7	0.03
Restructuring and repositioning expenses	2.3	0.6	1.7	0.03	5.6	1.1	4.5	0.07
Third-party acquisition-related costs	0.3	0.1	0.2	—	0.9	0.3	0.6	0.01
Income tax expense related to historical tax attributes(D)		—	—	—		(4.7)	4.7	0.07
Discrete tax items		1.0	(1.0)	(0.01)		—	—	—
Adjusted EPS(A)				\$ 0.93				\$ 0.82

The Notes to the Financial Information are included as part of the Earnings Release.

W. R. Grace & Co. and Subsidiaries
Notes to the Financial Information

(A) In the above, Grace presents financial information in accordance with U.S. generally accepted accounting principles (U.S. GAAP), as well as the non-GAAP financial information described below. Grace believes that this non-GAAP financial information provides useful supplemental information about the performance of its businesses, improves period-to-period comparability and provides clarity on the information management uses to evaluate the performance of its businesses. In the above charts, Grace has provided reconciliations of these non-GAAP financial measures to the most directly comparable financial measure calculated and presented in accordance with U.S. GAAP. These non-GAAP financial measures should not be considered as a substitute for financial measures calculated in accordance with U.S. GAAP, and the financial results calculated in accordance with U.S. GAAP and reconciliations from those results should be evaluated carefully. Grace defines these non-GAAP financial measures as follows:

- Adjusted EBIT means net income attributable to W. R. Grace & Co. shareholders adjusted for interest income and expense; income taxes; costs related to legacy matters; restructuring and repositioning expenses and asset impairments; pension costs other than service and interest costs, expected returns on plan assets, and amortization of prior service costs/credits; gains and losses on sales of businesses, product lines, and certain other investments; third-party acquisition-related costs and the amortization of acquired inventory fair value adjustment; and certain other items that are not representative of underlying trends.
- Adjusted EBITDA means Adjusted EBIT adjusted for depreciation and amortization.
- Adjusted EBIT Return On Invested Capital means Adjusted EBIT (on a trailing four quarters basis) divided by the sum of net working capital, properties and equipment and certain other assets and liabilities.
- Adjusted Gross Margin means gross margin adjusted for pension-related costs included in cost of goods sold and the amortization of acquired inventory fair value adjustment.
- Adjusted EPS means diluted EPS adjusted for costs related to legacy matters; restructuring and repositioning expenses and asset impairments; pension costs other than service and interest costs, expected returns on plan assets, and amortization of prior service costs/credits; gains and losses on sales of businesses, product lines, and certain other investments; third-party acquisition-related costs and the amortization of acquired inventory fair value adjustment; certain other items that are not representative of underlying trends; and certain discrete tax items and income tax expense related to historical tax attributes.
- Adjusted Free Cash Flow means net cash provided by or used for operating activities minus capital expenditures plus cash flows related to legacy matters; cash paid for restructuring and repositioning; capital expenditures related to repositioning; cash paid for third-party acquisition-related costs; and accelerated payments under defined benefit pension arrangements.
- Net Sales, constant currency means the period-over-period change in net sales calculated using the foreign currency exchange rates that were in effect during the previous comparable period.
- Organic sales growth means the period-over-period change in net sales excluding the sales growth attributable to acquisitions.

“Legacy matters” include legacy (i) product, (ii) environmental, and (iii) other liabilities, relating to past activities of Grace.

Adjusted EBIT, Adjusted EBITDA, Adjusted EBIT Return On Invested Capital, Adjusted Gross Margin, Adjusted EPS, Adjusted Free Cash Flow, Net Sales, constant currency, and Organic sales growth do not purport to represent income or liquidity measures as defined under U.S. GAAP, and should not be considered as alternatives to such measures as an indicator of Grace's performance or liquidity.

Grace uses Adjusted EBIT as a performance measure in significant business decisions and in determining certain incentive compensation. Grace uses Adjusted EBIT as a performance measure because it provides improved period-to-period comparability for decision making and compensation purposes, and because it better measures the ongoing earnings results of its strategic and operating decisions by excluding the earnings effects of legacy matters; restructuring and repositioning activities; the effects of acquisitions; and certain other items that are not representative of underlying trends.

Grace uses Adjusted EBITDA, Adjusted EBIT Return On Invested Capital, Adjusted Gross Margin, and Adjusted EPS as performance measures and may use these measures in determining certain incentive compensation. Grace uses Adjusted EBIT Return On Invested Capital in making operating and investment decisions and in balancing the growth and profitability of operations. Grace uses Net Sales, constant currency as a performance measure to compare current period financial performance to historical financial performance by excluding the impact of foreign currency exchange rate fluctuations that are not representative of underlying business trends and are largely outside of its

control. Grace uses Organic sales growth to measure its businesses' sales performance, excluding the impacts of acquisitions.

Grace uses Adjusted Free Cash Flow as a liquidity measure to evaluate its ability to generate cash to support its ongoing business operations, to invest in its businesses, and to provide a return of capital to shareholders. Grace also uses Adjusted Free Cash Flow as a performance measure in determining certain incentive compensation.

Adjusted EBIT, Adjusted EBITDA, Adjusted EBIT Return On Invested Capital, Adjusted Gross Margin, Adjusted EPS, Adjusted Free Cash Flow, Net Sales, constant currency, and Organic sales growth do not purport to represent income measures as defined under U.S. GAAP, and should not be used as alternatives to such measures as an indicator of Grace's performance. These measures are provided to investors and others to improve the period-to-period comparability and peer-to-peer comparability of Grace's financial results, and to ensure that investors and others understand the information Grace uses to evaluate the performance of its businesses. They distinguish the operating results of Grace's current business base from the costs of Grace's legacy matters; restructuring and repositioning activities; and certain other items. These measures may have material limitations due to the exclusion or inclusion of amounts that are included or excluded, respectively, in the most directly comparable measures calculated and presented in accordance with U.S. GAAP and thus investors and others should review carefully the financial results calculated in accordance with U.S. GAAP.

Adjusted EBIT has material limitations as an operating performance measure because it excludes costs related to legacy matters, and may exclude income and expenses from restructuring and repositioning activities, which historically have been material components of Grace's net income. Adjusted EBITDA also has material limitations as an operating performance measure because it excludes the impact of depreciation and amortization expense. Grace's business is substantially dependent on the successful deployment of capital, and depreciation and amortization expense is a necessary element of our costs. Grace compensates for the limitations of these measurements by using these indicators together with net income as measured under U.S. GAAP to present a complete analysis of our results of operations. Adjusted EBIT and Adjusted EBITDA should be evaluated together with net income and net income attributable to Grace shareholders, measured under U.S. GAAP, for a complete understanding of Grace's results of operations.

Grace is unable without unreasonable efforts to estimate the annual mark-to-market pension adjustment or future net income or diluted EPS. Without the availability of this significant information, Grace is unable to provide reconciliations for certain forward-looking information set forth in the Outlook, above.

- (B) Grace's segment operating income includes only Grace's share of income from consolidated and unconsolidated joint ventures.
- (C) Certain pension costs include only ongoing costs recognized quarterly, which include service and interest costs, expected returns on plan assets, and amortization of prior service costs/credits. Catalysts Technologies and Materials Technologies segment operating income and corporate costs do not include any amounts for pension expense. Other pension related costs including annual mark-to-market adjustments and actuarial gains and losses are excluded from Adjusted EBIT. These amounts are not used by management to evaluate the performance of Grace's businesses and significantly affect the peer-to-peer and period-to-period comparability of our financial results. Mark-to-market adjustments and actuarial gains and losses relate primarily to changes in financial market values and actuarial assumptions and are not directly related to the operation of Grace's businesses.
- (D) Grace's historical tax attribute carryforwards (net operating losses and tax credits) unfavorably affected its tax expense with respect to certain provisions of the Tax Cuts and Jobs Act of 2017. To normalize the effective tax rate, an adjustment was made to eliminate the tax expense impact associated with the historical tax attributes in 2018. Grace expects to be in a U.S. taxable income position in 2019 and, as such, does not anticipate that these historical tax attribute carryforwards will have a significant effect on its net income. These projections of U.S. taxable income may change in subsequent quarters, which could change Grace's U.S. GAAP tax expense and net income for 2019.

NM - Not Meaningful